

Lacuna divaricata. The mistake made by Fabricius in supposing this was Linné's species does not invalidate his claim to the authorship of the specific name, inasmuch as it belongs to a different genus. The specific name has been adopted by Möller, Lovén, Sars, the Messrs. Adams, Petit, and nearly every other writer on North-European shells.

Natica affinis of Gmelin is unquestionably the *N. clausa* of Sowerby. It was originally figured and noticed by Olafsen and Povelsen in their 'Reise igiennem Island' (1772), vol. i. t. x. and vol. ii. pp. 665 and 1016. It was afterwards (1776) described by O. F. Müller in his Prodrömus to the 'Zoologia Danica,' p. 245. no. 2956, citing Olafsen and Povelsen's work, but without a specific name. That name (*affinis*) was given by Gmelin in his edition of the 'Systema Naturæ' (1788), p. 3675, with a reference to Müller as above and the following habitat, "in Oceano septentrionali." Prof. Verrill has mistaken for this species the *Nerita australis* of Gmelin, which is described as having a silverish mouth or aperture and inhabiting New Zealand. He might have spared his note of admiration.

In conclusion I acknowledge my obligation to Prof. Verrill for pointing out the mistakes, although so very few, which I made. I conscientiously did my best with the materials at my command, and I am satisfied if I have done something towards correlating the European with the North-American Mollusca.

BIBLIOGRAPHICAL NOTICES.

Birds of the Humber District. By JOHN CORDEAUX.

London: Van Voorst, 1872.

THE pursuit of Natural History has, we rejoice to say, become exceedingly popular of late years; and perhaps nothing has tended to diffuse this taste more generally than the publication of local Faunas. Not very long ago the immortal chronicler of Selborne, whom every field-naturalist still regards as his patron saint, stood nearly alone in this department; and his faithful though simple records, limited almost to a single parish, have possessed a charm for succeeding generations, and roused a kindred feeling among out-of-door observers, who naturally take a deeper interest in things they see around them than in those they merely read of. If "the schoolmaster has been abroad," so has the botanist, the geologist, the entomologist, and last, though not least, the ornithologist. So preeminent, indeed, are the attractions of this charming study, that its votaries are probably

more numerous than those of any other branch of zoology. We do not here allude to what may be termed the science of ornithology or to the labours of the closet-naturalist, to the manufacture of genera or the nomenclature of species, but to the knowledge acquired and to the delight experienced by the true lover of nature, who studies the habits of his feathered favourites in the woods, in the fields, on the sea-shore, or in the swamps and fens of the county to which, either from choice or chance, his attention has been especially directed.

Such a one is Mr. Cordeaux, the author of the volume before us, which is evidently the result of assiduous observation at all seasons and in all weathers, during a period of ten years, in the maritime tract which he characterizes as "The Humber District," including within its limits not only the wide estuary itself, with its muddy flats from the Spurn Head to its junction with the Trent and Ouse, but "the lands adjoining, namely part of North and Mid Lincolnshire and Holderness, a district enclosed to the north, west, and south by the curved sweep of the wold hills. To the east its sea-board extends from Flamborough Head in the north to Skegness on the Lincolnshire coast in the south. This is a well-defined and clearly marked province, both geologically and zoologically. It may be compared to a half circle or bent bow, the Lincolnshire and Yorkshire wolds forming the bow, the coast-line the string; whilst the great river itself is like an arrow placed in the string and across the bow, dividing the district into two nearly equal divisions." (Introduction, page v.)

But in spite of the attractions it still possesses for the practical observer, our author tells us that even in the beginning of the present century, "when Colonel Montagu made his celebrated ornithological tour through Lincolnshire," it had been shorn of much of its ancient wildness, "immense changes having taken place in the physical features of the country by the drainage and partial cultivation of the fen lands. Some species of birds had disappeared, and others were rapidly verging on extinction." Truly it must have been a perfect paradise for wild fowl before it became what it now is, "probably the best-farmed county in the kingdom."

Mr. Cordeaux says that the migratory birds visiting this district in the autumn and winter, almost without an exception, come from the direction of the sea, arriving on the coast in lines of flight varying from full north to east.

"The only exception to this rule is that of the Grey or Winter Wagtail (*Motacilla boarula*), which reaches us from the west or north-west. In the spring also, I am strongly inclined to think, the greater portion of our little summer visitors, including the delicate Warblers and Willow-wrens, arrive from the sea, coming from the south-east to east, appearing first in the warmer and low-lying country between the coast and the foot of the wold range, and gradually extending inland across the high wolds, a cold backward district, to the interior of the county." (Introduction, page vi.)

The latter portion of the above paragraph is exceedingly interest-

ing. We can testify, from our own observation, that most of our insectivorous vernal visitors, in the southern and south-western maritime counties, also "arrive directly from the sea," apparently from the opposite coast of France; but to reach the Humber district these delicate migrants from the south (and even from the south-east) apparently make a *detour* of many miles to avoid the projecting coast of Norfolk, showing that "the overland route" has less attraction for them than the open sea-voyage at this season of the year.

Our author fully appreciates the value of that indispensable companion of the field-naturalist, a good spy-glass. We envy his experience as recorded in the following passage:—

"The Godwits which visit our foreshore in the spring and autumn feed largely on an annelid, *Arenicola piscatorum*, or some allied species, which they obtain by boring. With the aid of my telescope I have frequently observed their manner of feeding. They advance rather quickly over the flats, and at the same time keep rapidly thrusting their long bills into the ooze, as if feeling for some concealed creature. It is easy to see when any are successful, as instantly every motion displays extreme energy, the bird's head itself being half buried in its eagerness to grasp and hold its wriggling prey. Often when the bill is withdrawn I have seen a huge lob-worm, held crossways, dangling from it. This requires some little manipulation before it can be swallowed; the Godwit's head is thrown backwards, and the mandibles are rapidly worked till the worm becomes properly adjusted, when down it goes, the neck perceptibly swelling and thickening in the descent; then there is a satisfied smack of the mandibles, and the search recommences." (Page 119.)

The Ruff (*Machetes pugnax*) and Reeve (female) are still associated in the popular mind with the fens of Lincolnshire; and, judging from the numbers occasionally exposed in the London markets, the species is yet numerous; but most, if not all, of these birds are supplied from Holland. Mr. Cordeaux says:—

"The Ruff and Reeve, formerly so abundant in Lincolnshire, where its capture and feeding for the London market was a regular trade, is now only known as a bird of passage, lingering for a few weeks or days in small numbers in the neighbourhood of its old haunts during the period of the spring and autumn migrations. It is almost a regular autumn, but only an occasional spring, visitant to this district." (Page 120.)

That apparently fragile little creature, the Golden-crested Wren (*Regulus cristatus*), unlike so many comparatively robust insectivorous birds, remains with us the whole year; but, avoiding equally the extremes of heat and cold, vast numbers arrive on the east coast of Lincolnshire and Yorkshire at the period of the autumnal migration, when they "cross the wild North Sea, arriving on our eastern shores in October. The migration of the Golderests is now a fact as well established as is that of the Woodcocks. They appear about the second or third week in October, preceding the Woodcocks by a few

days ; and so well is this known to those living on the east coast of Yorkshire and Lincolnshire that they have earned for themselves the sobriquet of the ‘Woodcock-pilots.’ Almost every year I find some about the second week of October, either on the Humber embankments or in the marsh hedgerows. On the 12th of that month in 1863 an extraordinary flight appeared in the Great-Cotes marshes. On that morning I observed large numbers of these fairy birds on the hedgerows and bushes in the open marsh district near the Humber, many also creeping up and down on the reeds in the drains, and at my lonely marsh farmstead quantities of these active little fellows, everywhere busily searching every nook and corner on the fold-yard fences, the cattle-sheds, and stacks. The Golderest appears in flocks every year, both at Spurn and Flamborough, about the middle of October ; they have on several occasions been found dead beneath these lighthouses, having dashed bewildered against the glass lanterns in their night migration.” (Page 37.)

Equally valuable are our author’s notes on the arrival and departure of our shore and sea birds ; but some of his personal experiences and observations are even more especially interesting ; and we only regret that we have not space for copious extracts in verification of our opinion. Here is a delightful little episode, the hero of which is one of our rarest feathered visitors from the far north, and the only example of the species that Mr. Cordeaux had ever met with in the county :—

“December 12th, 1870. I came quite suddenly this morning on a beautiful little Phalarope (*Phalaropus hyperboreus*) swimming in a drain near the Humber. I saw at once, by its small size (about as large as a Dunlin) and plumage, that it was not the grey species. The little bird rode as buoyantly as a gull upon the water, with head thrown backward like a duck. It was the first occasion that I have seen a Phalarope in these marshes ; I observed all its movements intently. It was shy, but not wild, diving on my approach for twenty yards up the drain, and then, leaving the water, ran along the narrow strip of ‘warp’ like a Sandpiper. On my moving forward it again entered the water, diving further up the drain, issuing as before on to the ‘warp,’ but this time under the opposite bank ; the dive was again repeated, when I lost sight of it round a sharp bend in the stream. For the next ten minutes I stood at this corner, vainly looking both up and down the drain for its reappearance, and had nearly given it up when I caught sight of the little creature directly opposite, and within a few feet—so near, that had I reached forward I might have touched it with the gun-muzzle. No wonder that I had overlooked it ; for it had now exactly the appearance of a small lump of earth fallen from the bank ; the whole of its body was sunk below the water, excepting the upper part of the back and head from just below the eyes, which were level with the surface—the bill and fore part of the forehead also immersed, the water covering the hind part of the neck between the back and head. The deception was perfect ; and had I not been specially looking, I might have passed the place scores of times

without noting any thing unusual. As it was, I had stood within a few feet for several minutes, and had passed my eyes over and over again across the place without finding it. Once, and once only, it raised its head, and immediately afterwards dived, going under very quietly and leaving hardly a ripple; this time I saw it emerge on the drain side about the same distance, namely twenty yards. Just then a flight of Plover passed, at which I fired; and I think the report must have caused it to rise, as, although I spent an hour in looking up and down the drain, and returned again at a later period in the day, I saw it no more." (Page 140.)

Vast numbers of Guillemots (*Uria troile*) and Razor-bills (*Alca torda*) breed on the precipitous cliff of Flamborough Head, as well as in various similar localities on the coasts of the British Islands. We ourselves have never had the good fortune to observe the mode in which the mother birds safely convey their young to the water from their aerial nurseries on the upper ledges, although we have often watched patiently for hours, in the vain hope of witnessing the performance. Indeed until now we never met with a satisfactory solution of the mystery; but here it is:—

"When the young are partly fledged, and even when they are quite little things, the old birds carry them down to the sea on their backs. This is done late in the evening, after sunset. The Flamborough boatmen say that when they are fishing under the Speeton Cliffs, on summer evenings, they have often observed this process of carrying the young down, the little fellow clinging to its parent's back, and not unfrequently tumbling from the somewhat precarious perch into the sea sooner than was intended." (Page 184.)

We must now take leave of this, the latest contribution to the avifauna of the British Islands, which, as a careful and painstaking record of the arrival of our migratory birds on the shores and flats of the wild and interesting region to which the author's remarks have been limited, may be regarded as almost exhaustive; and we heartily recommend, as a model for future monographers with similar tastes and equal opportunities, this charming little volume on the "birds of the Humber District."

Lecture on the Force Nature of the British Islands.

By JOHN COLQUHOUN, Author of 'The Moor and the Loch,' &c.

IF quality, not quantity, is the test of merit, then is the little brochure before us (for its modest dimensions forbid a claim to a more ambitious title) deserving of our warmest commendation. Though purporting to be simply "a lecture delivered to the St. Steven's Young Men's Literary Society," yet it contains matter that might easily be expanded into a goodly volume. Indeed the pleasure we have experienced in perusing its few though charming pages induces us to regard with envy the favoured audience who enjoyed the still greater treat of listening to the instructive words of such an observant naturalist and dexterous sportsman as the author of 'The Moor and the Loch.'